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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,142	01/27/2004	Raja Banerjee	03-16	1947
30699	7590	07/24/2006	EXAMINER	
DAYCO PRODUCTS, LLC 1 PRESTIGE PLACE MIAMISBURG, OH 45342			RIVELL, JOHN A	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/766,142		BANERJEE ET AL.	
	Examiner		Art Unit	
	John Rivell		3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/3/06 (amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-13 and 18-25 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-13 and 18-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's arguments with respect to claims 5-13 and 18-25, filed May 3, 2005 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-4 and 14-17 have been canceled. Claims 5-13 and 18-25 remain pending.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 10, 21 and 22 are rejected under 35 U.S.C. §102 (b) as being anticipated by Fieldler et al.

The patent to Fieldler et al. discloses a “fuel fill system comprising: a funnel (2) having an inlet port (19) configured to receive a nozzle (13) from an external fuel source; a fuel filler tube (3) coupled to an outlet port of the funnel (2); and a vapor recirculation tube (9) coupled to the funnel (2), wherein, in a plane perpendicular to a longitudinal axis of the funnel (as illustrated in fig. 3), the fuel vapor entering the funnel from the vapor recirculation tube (9) is directed at a first angle less than 90° from a line tangent to an inner surface of the funnel (2) at a point where the fuel vapor enters a funnel” as recited.

Here the drawings are relied on for disclosure. See M.P.E.P. §.2121.04 and 2125 for direction in utilizing patent drawings as references. Accordingly, as perceived from figure 3, as the vapor return tube 9 is illustrated as being connected to funnel 2 offset from a centerline of the funnel, fuel vapor entering the funnel 2 from the vapor

vent line enters tangentially. Thus "the fuel vapor entering the funnel from the vapor recirculation tube (9) is directed at a first angle less than 90° from a line tangent to an inner surface of the funnel (2) at a point where the fuel vapor enters a funnel" as recited.

Regarding applicants remarks as they may apply, the vapor recirculation tube 9 of Fieldler et al. is attached to a "cylindrical portion" of the funnel 2.

Regarding claim 10, in Fieldler et al., "a fuel vapor port (is) disposed through the funnel (2) and in fluid communication with the vapor recirculation tube (9), the fuel vapor port having a centerline disposed at a first angle" as recited.

Regarding claim 21, Fieldler et al. a "funnel (2) for a fuel fill system, the funnel (2) comprising: an inlet port (19) configured to receive a nozzle (13) from an external fuel source; an outlet port through which fuel from the nozzle (13) passes to a fuel filler tube (3); and a fuel vapor port (at the end of tube 9) configured to direct fuel vapor entering the funnel (2) at a first angle less than 90° from a line tangent to an inner surface of the funnel (2) at a point where the fuel vapor enters the funnel (2), the angle being in a plane perpendicular to a longitudinal axis of the funnel (2)" as recited and as perceived from fig. 3.

Regarding claim 21, in Fieldler et al., "the fuel vapor port (at eh end of tube 9) has a centerline disposed at the first angle" as recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5-8, 11-13, 18-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fieldler et al. in view of Yamazaki et al.

The patent to Fieldler et al. discloses a "fuel fill system comprising: a funnel (2) having an inlet port (at 19) configured to receive a nozzle (13) from an external fuel source; a fuel filler tube (3) coupled to an outlet port (downstream of indentation 24) of the funnel (2); and a vapor recirculation tube (9) coupled to the funnel (2), wherein fuel vapor from the vapor recirculation tube (9) enters the funnel (2) through a fuel vapor port,... wherein the funnel (2) includes a cylindrical portion (4) through which the fuel vapor port is disposed, the fuel vapor port has a centerline... and wherein, in a plane perpendicular to a longitudinal axis of the funnel (as illustrated in figure 3) the fuel vapor port further directs fuel vapor at a second angle less than 90° from a line tangent to an inner surface of the funnel at a point where fuel vapor enters the funnel" as recited in claim 5, and the fuel vapor port directs the fuel vapor toward the outlet port" to the left of numeral 22' as recited in claim 5.

Thus the patent to Fieldler et al. discloses all the claimed features with the exception of having "the fuel vapor port (having) a centerline disposed at a first angle less than 90° from a longitudinal axis of the cylindrical portion" such that the "fuel vapor port directs the fuel vapor toward the outlet port" connected to neck 3.

The patent to Yamazaki et al. discloses that it is known in the art to employ a vapor recirculation tube (27₃) coupled to the funnel (22a'), wherein fuel vapor from the

vapor recirculation tube (27₃) enters the funnel (22a') through a fuel vapor port, and the fuel vapor port directs the fuel vapor toward the outlet port" to the left of numeral 22' for the purpose of conducting fuel vapor exhausted from the fuel tank during refueling into the filler neck to be entrained by, and mixed with, the liquid fuel entering the fuel funnel for return to the fuel tank precluding potentially hazardous fuel vapor leakage to the atmosphere.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Fieldler et al. a fuel vapor port, at the end of vapor recirculation tube 9 which is connected to funnel 2, so located such that fuel vapor is directed toward the outlet of the funnel for the purpose of conducting fuel vapor exhausted from the fuel tank during refueling into the filler neck to be entrained by, and mixed with, the liquid fuel entering the fuel funnel for return to the fuel tank precluding potentially hazardous fuel vapor leakage to the atmosphere as recognized by Yamazaki et al.

Regarding claim 6, in Fieldler et al., "the fuel vapor port (at the end of tube 9 connected to funnel 2) has a centerline disposed at the second angle" as recited.

Regarding claims 7 and 8, on thorough review of figure 3 of Fieldler et al., "the second angle is between about 20° to about 70°" and "is between about 30° to about 60°" as recited.

Regarding claim 11, on thorough review of Yamazaki et al., "the centerline of the fuel vapor port is ... disposed at a second angle less than 90° from the longitudinal axis of the funnel to direct the fuel vapor toward the outlet port" as recited.

Regarding claims 12 and 13, on thorough review of both Fieldler et al. and Yamazaki et al. "each of the first and second angles is between about 20° to about 70°" and "each of the first and second angles is between about 30° to about 60°" as recited.

Regarding claim 18, Fieldler et al. discloses a "funnel (2) for a fuel fill system, the funnel (2) comprising: an inlet port (19) configured to receive a nozzle (13) from an external fuel source; an outlet port through which fuel from the nozzle (13) passes to a fuel filler tube (3); and a fuel vapor port (at the end of recirculation tube 9) configured to direct fuel vapor entering the funnel (2) towards... wherein the fuel vapor port has a centerline disposed at a first angle less than 90° from a longitudinal axis of the funnel (2); and wherein the fuel vapor port is further configured to direct the fuel vapor entering the funnel (2) at a second angle less than 90° from a line tangent to an inner surface of the funnel (2) at a point where the fuel vapor enters the funnel (2), the angle being in a plane perpendicular to the longitudinal axis of the funnel"

Thus the patent to Fieldler et al. discloses all the claimed features with the exception of having "the fuel vapor port (having) a centerline disposed at a first angle less than 90° from a longitudinal axis of the cylindrical portion" such that the "fuel vapor port directs the fuel vapor toward the outlet port" connected to neck 3.

The patent to Yamazaki et al. discloses that it is known in the art to employ a vapor recirculation tube (27₃) coupled to the funnel (22a'), wherein fuel vapor from the vapor recirculation tube (27₃) enters the funnel (22a') through a fuel vapor port, and the fuel vapor port directs the fuel vapor toward the outlet port" to the left of numeral 22' for the purpose of conducting fuel vapor exhausted from the fuel tank during refueling into the filler neck to be entrained by, and mixed with, the liquid fuel entering the fuel funnel for return to the fuel tank precluding potentially hazardous fuel vapor leakage to the atmosphere.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Fieldler et al. a fuel vapor port, at the end of vapor recirculation tube 9 which is connected to funnel 2, so located such that fuel

vapor is directed toward the outlet of the funnel for the purpose of conducting fuel vapor exhausted from the fuel tank during refueling into the filler neck to be entrained by, and mixed with, the liquid fuel entering the fuel funnel for return to the fuel tank precluding potentially hazardous fuel vapor leakage to the atmosphere as recognized by Yamazaki et al.

Regarding claims 19 and 20, on thorough review of figure 3 of Fieldler et al., "the second angle is between about 20° to about 70°" and "is between about 30° to about 60°" as recited.

Regarding claim 23, on thorough review of Yamazaki et al., "the centerline of the fuel vapor port is ... disposed at a second angle less than 90° from the longitudinal axis of the funnel to direct the fuel vapor toward the outlet port" as recited.

Regarding claims 24 and 25, on thorough review of both Fieldler et al. and Yamazaki et al. "each of the first and second angles is between about 20° to about 70°" and "each of the first and second angles is between about 30° to about 60°" as recited.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John Rivell
Primary Examiner
Art Unit 3753

j.r.